

# Chromatographic separation of xylose crystallization run-off

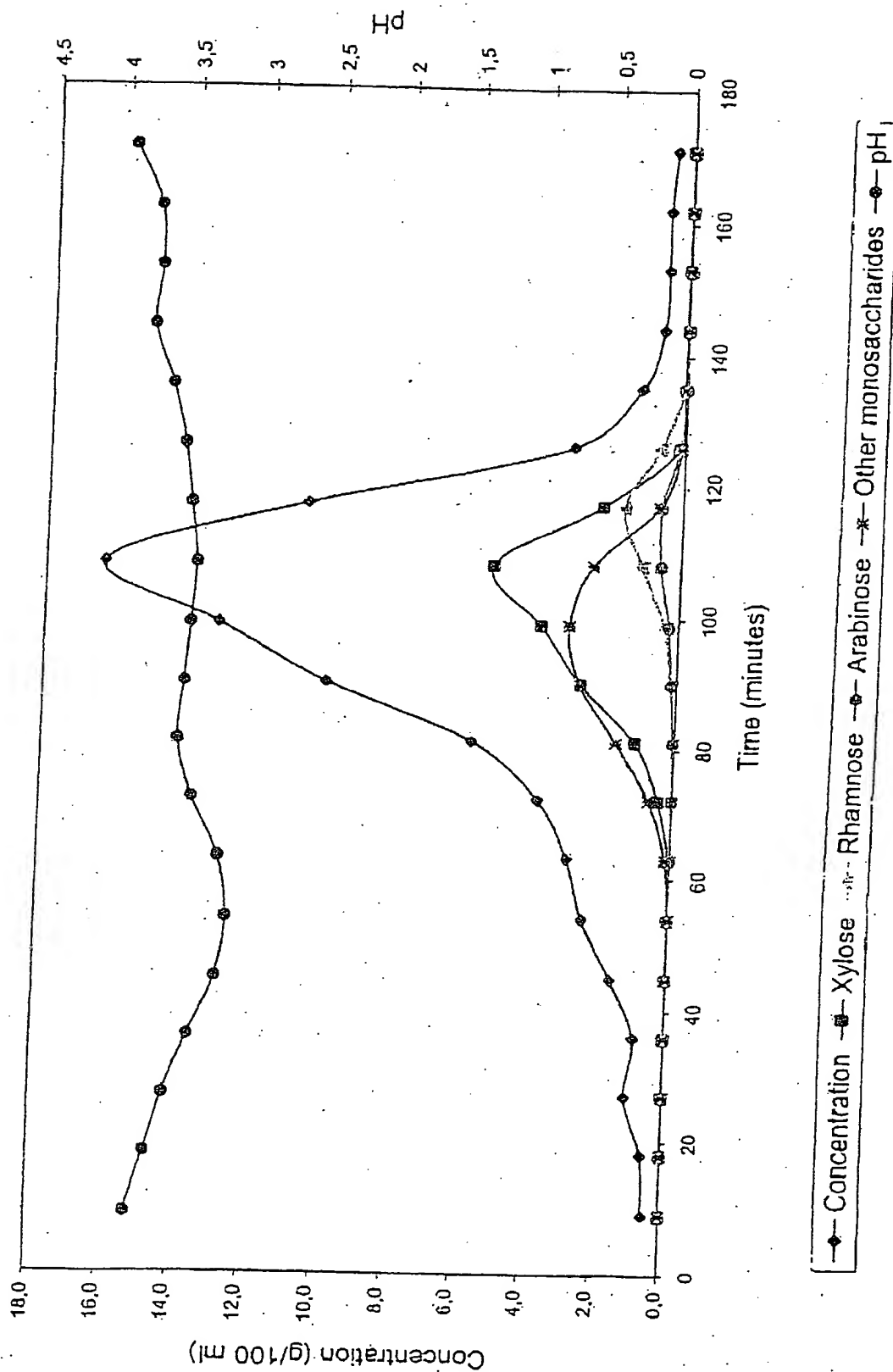


FIG. 1

# Chromatographic separation of xylose crystallization run-off

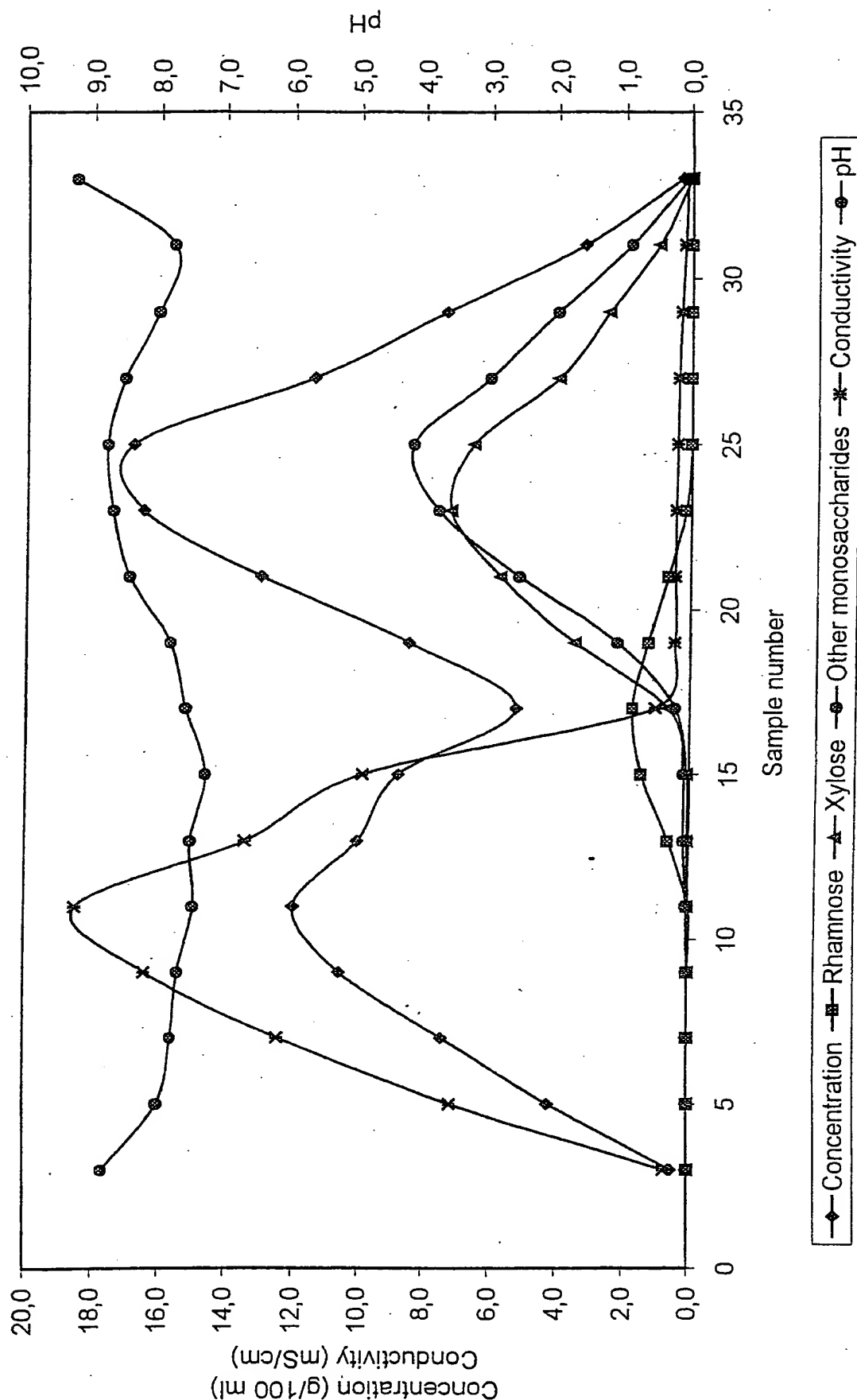


FIG. 2

# Chromatographic separation of xylose-arabinose fraction

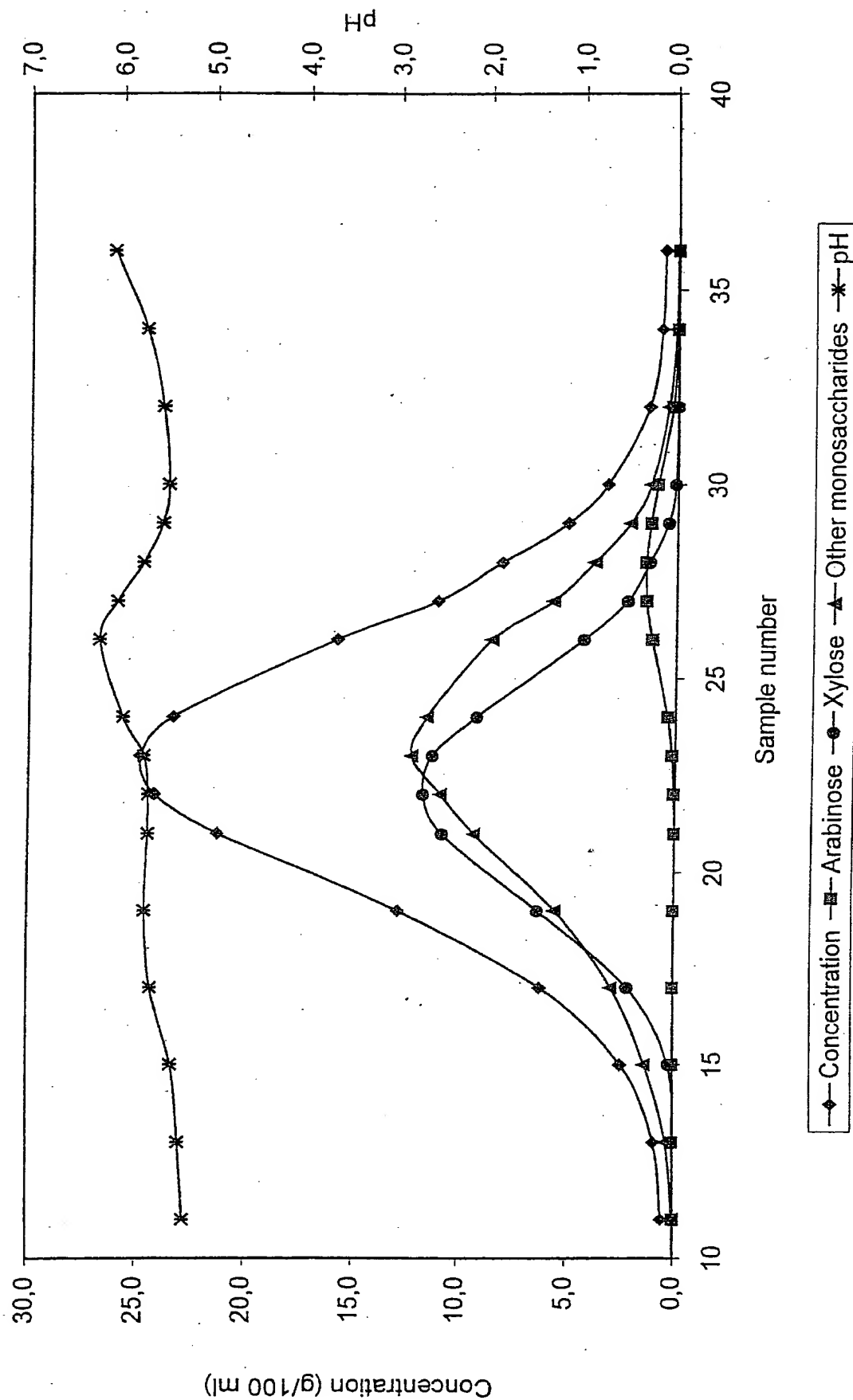


FIG. 3

# Chromatographic separation of xylose crystallization run-off A Na<sup>+</sup>-form strong acid cation exchange resin

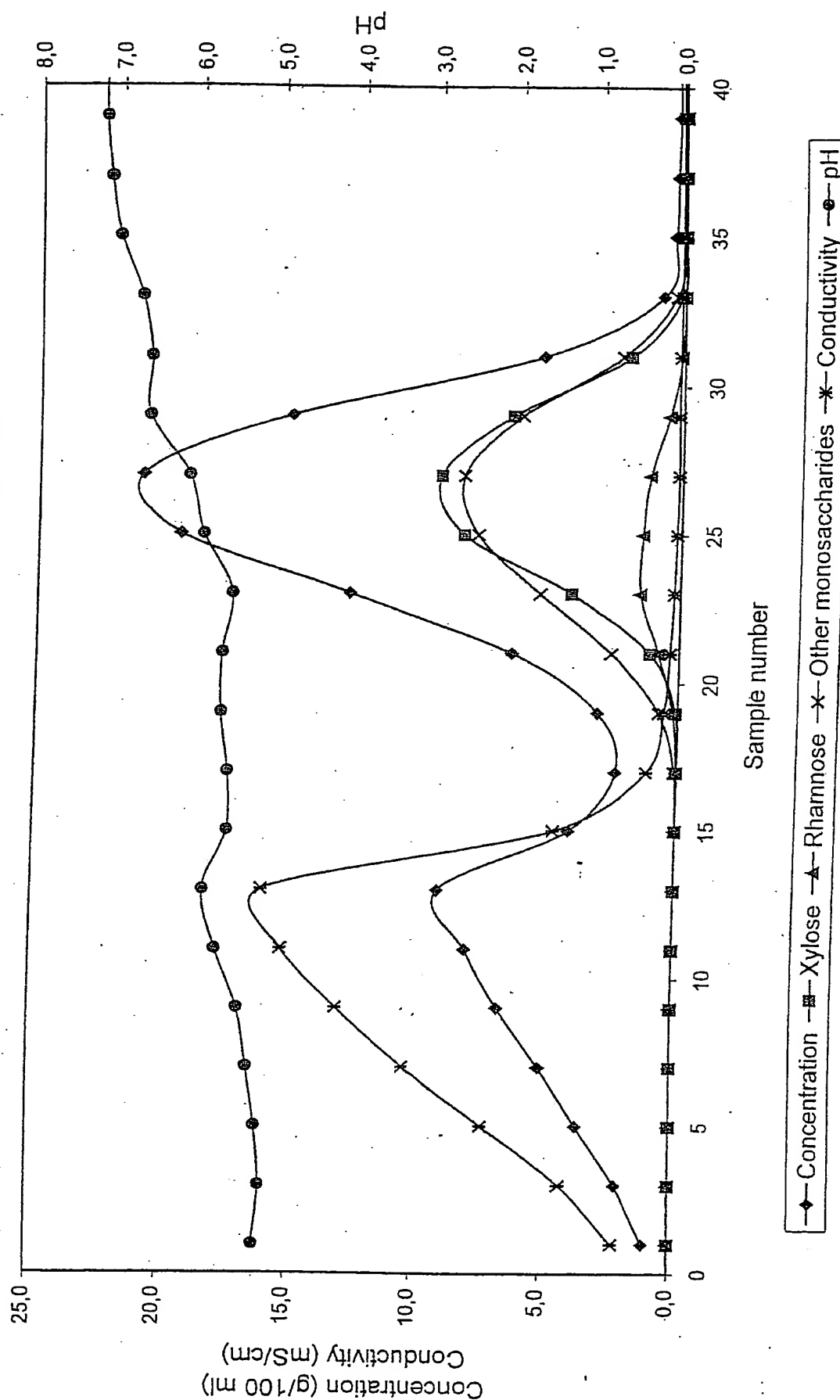


FIG. 4

# Chromatographic separation of rhamnose containing xylose fraction

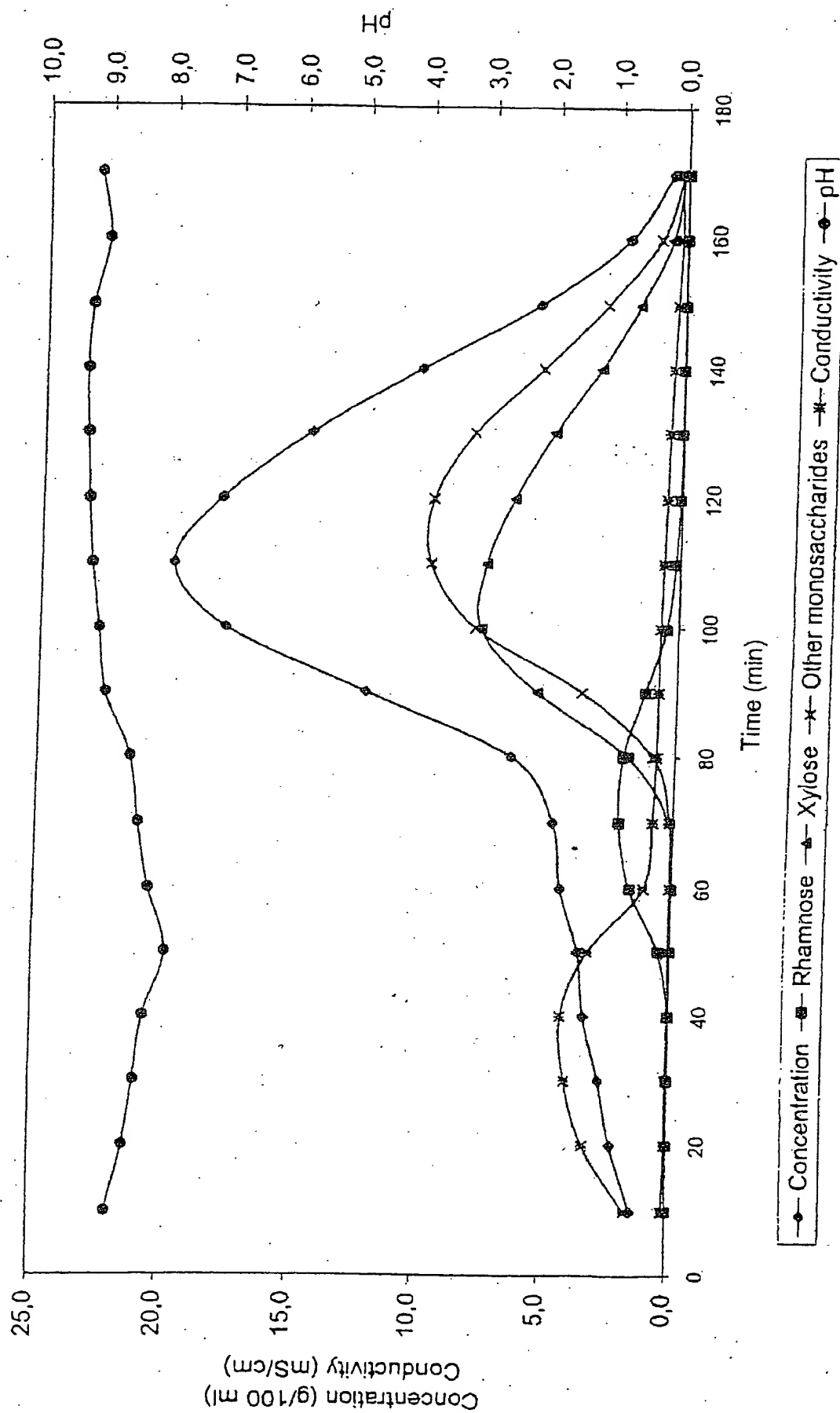


FIG. 5

# Chromatographic separation of rhamnose rich fraction

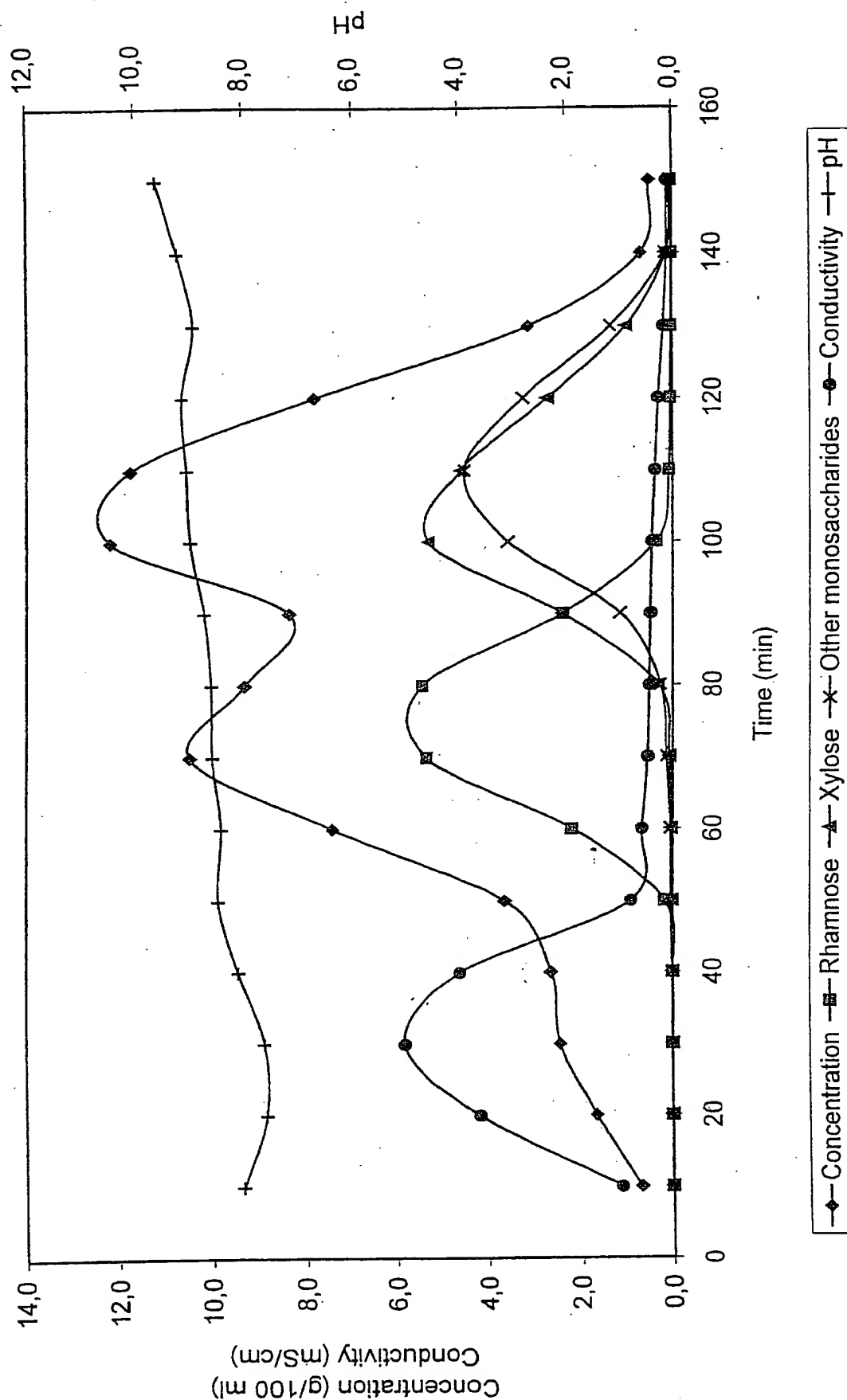


FIG. 6

# Chromatographic separation of rhamnose rich fraction

A  $\text{Ca}^{2+}$ -form strong acid cation exchange resin

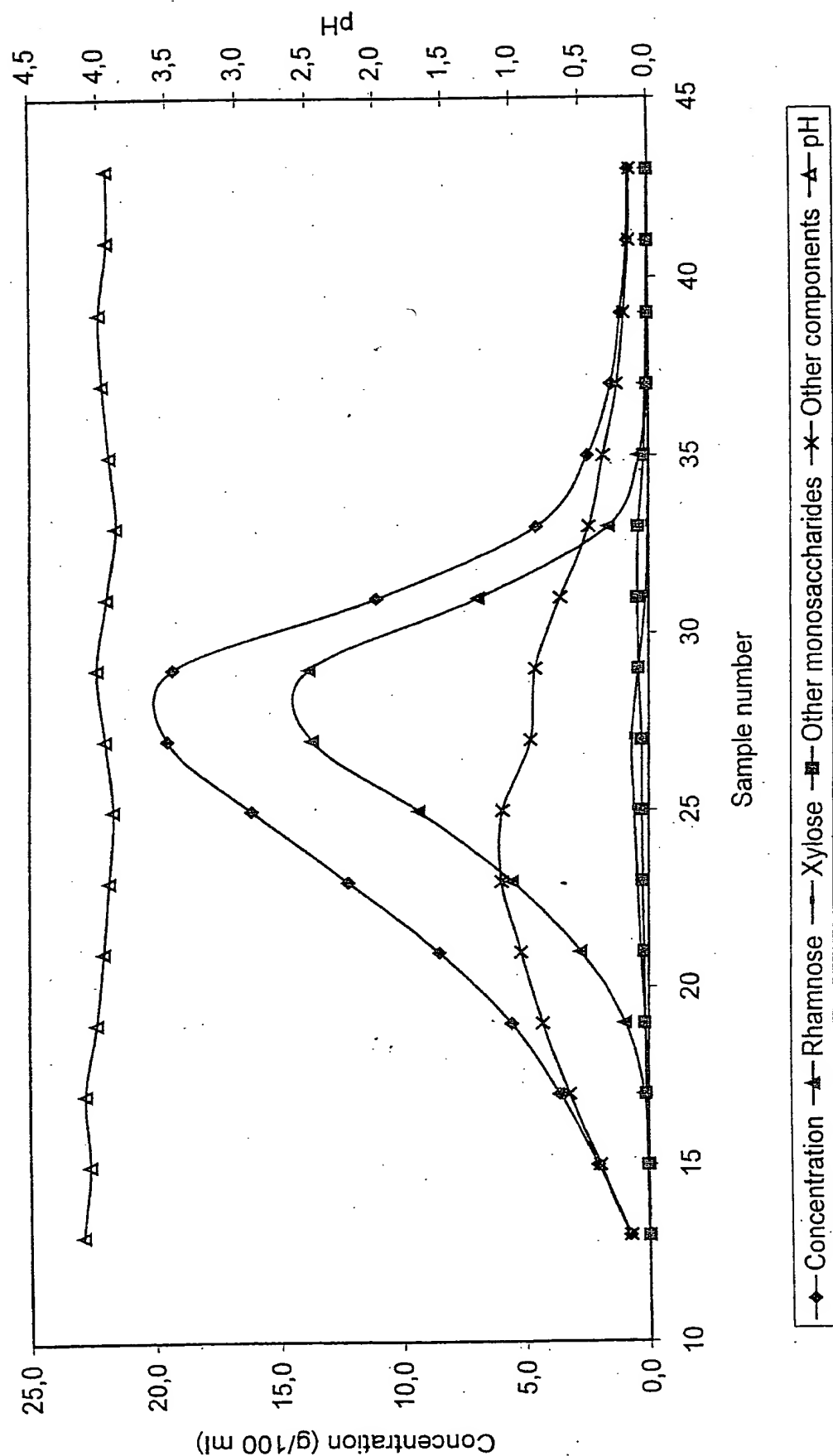


FIG. 7

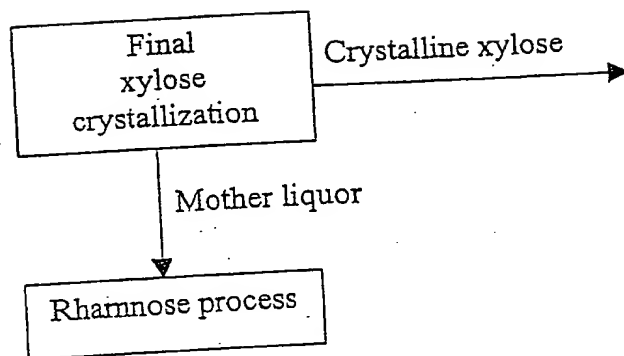


FIG. 8



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graph TD
    A[Xylose process] -->|Xylose fraction| B[ ]
    A -->|Arabinose fraction| C[ ]
    A -->|Mother liquor| D[Chromatographic separation]
    D --> E[Chromatographic separation]
    E -->|Xylose fraction| F[ ]
    E -->|Arabinose fraction| G[ ]
    E -->|Rhamnose fraction| H[Chromatographic separation]
    H -->|Rhamnose fraction| I[Rhamnose crystallization]
    I --> J[Crystalline rhamnose monohydrate]
  
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FIG. 9